

a3 of the transport scrambling control bits can be used to indicate an error when the transport packet payload is scrambled and decoding device expects a clear, non-encrypted stream.

[✓] Please replace paragraphs 1 and 2 on page 90 with the following:

a4 In addition to the specific errors indicated by the status codes, a transport packet having its transport error indicator bit asserted can be identified as an error, and in a specific embodiment can have its own error code.

a4 Another condition that can be enabled and recognized by the system as an error is the presence of TError signal of the physical stream interface illustrated in Figure 8. In a specific embodiment different errors associated with the TError signal can be recognized depending upon whether the TError signal is asserted before or after reception of the transport packet's PID.

In the Claims:

Please amend claims 1, 4, 7-12, 15, 16, 19-23, 25, 33-38, 40, 41, and 44 as follows:

- Sub B1
a5
1. (Amended) A method of handling errors in a system for receiving packet streams, the method comprising the steps of:
dynamically enabling detection of a condition that identifies as an error a packet stream that is scrambled;
determining if a received packet is scrambled; and
performing an error recovery operation.
 4. (Amended) The method of claim 1, wherein as a result of performing the error recovery operation, the received packet is disregarded.
 - Sub B1
a6
a7 Sub B1
7. (Amended) The method of claim 1, wherein dynamically enabling error detection includes enabling the error condition by asserting a register bit.
- 96
- A

Sub
BL

8. (Amended) The method of claim 1, wherein determining includes determining if the header information of the received packet indicates scrambling.

9. (Amended) The method of claim 1, wherein determining includes determining if the payload information of the packet stream packet payload is scrambled.

10. (Amended) The method of claim 9, wherein the payload information includes transport stream payload data.

AM

11. (Amended) The method of claim 9, wherein the payload information includes packetized elementary stream payload data.

12. (Amended) A method of handling errors in a system for receiving packet streams, the method comprising the steps of:
dynamically enabling hardware detection of a condition that identified an asserted indicator in a packet as a recognized error;
receiving the packet;
determining if the packet includes the asserted indicator; and
performing an error recovery operation when the packet includes the asserted indicator.

Sub
BL

15. (Amended) The method of claim 12, wherein enabling includes enabling hardware detection by asserting a register bit.

AG

16. (Amended) The method of claim 12, wherein the error recovery operation includes sending an error code to a video decoder to indicate the received packet has an asserted error indicator.

Sub
BL

AG

19. (Amended) The method of claim 18, wherein determining an asserted error code is performed in response to an external request.

Sub
B1

20. (Amended) A method of handling errors in a system for receiving a packet stream, the method comprising the steps of:
dynamically enabling detection of a condition that identifies a continuity discrepancy as a recognized error;
determining if the continuity discrepancy exists by the substeps of:
receiving a continuity count from a first packet;
receiving a continuity count from a second packet;
determining if the continuity discrepancy exists based upon the continuity counts from the first and second packet; and
performing an error recovery operation when a discrepancy exists.
21. (Amended) The method of claim 20 further comprising the step of:
maintaining a continuity discrepancy count, whereby the count is incremented when a continuity discrepancy is detected between the first and second packet;
maintaining a packet count, whereby the packet count is incremented to indicate the first and second packets are received; and
determining a continuity error rate based upon the continuity discrepancy count and the packet count.
22. (Amended) The method of claim 21, wherein determining a continuity error rate is performed in response to an external request.
23. (Amended) The method of claim 21 further comprising the step of:
generating an error indicator for transfer to a first external device.

Sub
B1

25. (Amended) A method of handling errors in a system for receiving packetized elementary streams, the method comprising the steps of:
dynamically enabling detection of a condition that identifies syntax errors in a packetized elementary stream as a recognized error;
determining if a syntax error exists by

A

also ^{SWR} B1 receiving a header portion of a packetized elementary stream;
determining if a predetermined syntax condition of the header portion is met,
where the syntax error exists if the syntax conditions are not met; and
performing an error recovery operation when a syntax error exists.

^{SWR} B1 33. (Amended) The method of claim 32, wherein receiving at least a portion of a packet includes the portion of a packet including a transport packet header.

34. (Amended) The method of claim 33, wherein receiving at least a portion of a packet includes the portion of the packet being a packetized elementary stream header.

35. (Amended) The method of claim 32, wherein determining an error occurred includes determining if an error bit in the at least a portion of the packet is enabled.

all 36. (Amended) The method of claim 32, wherein determining if an error occurred includes determining if an error occurred based upon at least a portion of the packet.

37. (Amended) The method of claim 32, wherein determining if an error occurred includes determining if an error occurred based upon a continuity counter.

38. (Amended) The method of claim 32, wherein the step of sending an error indicator to the video decoder processor includes sending the error code when at least the portion of the packet is at least a portion of a video packet.

A12 ^{SWR} B1 40. (Amended) The method of claim 39, wherein the step of sending an error indicator includes sending the error code in a compressed video stream.

a12
Sub
B1
41. (Amended) The method of claim 32, wherein the step of sending an error indicator includes the error code having a hexadecimal value of 0x000001B4.

a13
B1
44. (Amended) The method of claim 32, wherein sending an error indicator further includes sending the error indicator when the error signal is asserted after a packet identifier is received as a portion of the packet.

In the Abstract:

✓ Please replace the Abstract with the following:

a14
In accordance with a specific aspect of the present invention, a compressed video stream, such as an MPEG-2 video stream, is received by a transport demultiplexor, synchronized, parsed into separate packet types, and written to buffer locations external the demultiplexor. Adaptation field is handled by a separate parser. In addition, primary elementary stream data can be handled by separate primary elementary stream parsers based upon the packet identifier of the primary elementary stream. Video packets can be parsed based upon stream identifier values. Specific packets of data are stored in one or more system memory or video memory buffers by an output controller based upon allocation table information. Private data associated with specific elementary streams or packet adaptation fields are repacketized, and written to an output buffer location. In specific implementations, the hardware associated with the system is used to acquire the data stream without any knowledge of the specific protocol of the stream. In another embodiment, the hardware is used to implement a splicing of streams of data. In yet another embodiment of the present invention, detection and/or handling of an error condition is enabled for an error capable of being present in a packet stream.